NOTE: We are in the process of building this materials/equipment list for the new & updated units (2022-23).						
Links and vendors are to provide examples. Your cost using a preferred vendor may be different that the price indicated.						
We have tried to include everything that is needed to teach Patterns Biology with fidelity.						
Your school may already have materials that can be used.						
Original supply list:						
https://docs.google.com/spreadsheets/d/19I13ivLqAaH5EDFKtXnMSsnIgPkWY4TRFFi-x1hqxDI/edit#gid=28833259						
Preferred vendor:						
Frey Scientific (School Specialty)						

Task set	item description	Source / Link	Item Number	Unit Size	Reusable section to section? Y/N	Quantity per class	Quantity per group of 4	Quantity per class section (36 students)		Cost per item	Total cost per section (36 students)	Notes	
0	Welcome												
1.1 - Unit Opener	no lab materials needed												
1.2 - Biodiversity, Ecosystems & Seasonal Rounds	no lab materials needed												
1.3 - Biodiversity Inquiry	Large white trays												
	1/4" Mesh Metting	Amazon		roll	Y			1			$65.50	3.5'x100', this is enough for multiple schools for multiple years	
	garden moisture meter	Amazon		each	Y			3		$12.99	$38.97	Alternative: 3-in-1 or 4-in-1 meters are also available (example)	
	garden pH meter	Amazon		each	Y			3		$12.99	$65.50		
	transect tape			each	Y								
	pillowcases (non-flannel preferred)	students/families			N			18		$0.00	$0.00	Ask students/families to donate	
	light meter				Y							students use their cell phones	
	timer/stopwatch	students			Y							students use their cell phones	
	Garden gloves	Home Depot	202710221	10 pack	Y			4		$10.18	$40.72	You can also ask students to bring from home	
	Clipboards	Amazon		12 pack	Y			3		$19.95	$59.85	Nice to have plastic in case of rain.	
	Dissecting Scope	Fisher Scientific	S71004A	each	Y		2	18		$220.00	$3,960.00	One-time purchase. Getting the scope ratio to 1:2 students increases student engagement.	
	Microscope Cameras	Amazon		1	Y	10	1	12		$29.00	$348.00	Very useful for taking photos in the field or in the classroom. Much more economical option if dissecting scopes aren't available	
	Ethanol 95%	Carolina Biological	861283	1 gallon	N			1		$32.30	$32.30	Although more expensive, 95% ethanol can be diluted in the classroom. Alternative: drugstore isopropanol or ethanol at a lower concentration	
	Forceps	Frey		each	Y			36		$2.09	$75.24		
	Hand sanitizer	Amazon			N			1		$30.59	$30.59	In large quantities, good for multiple years. Used to stabilize specimes as well as to sanitize hands in the field. Students stabilize the specimens in the cups or well plates so that they are more easily moved during sorting. Important to get sanitizer with as few additives as possible.	
	5 gallon bucket	Home Depot	100087613	each	Y			18		$4.98	$89.64	One-time purchase, Also could borrow from students, janitors at school, etc. In one school, janitor washed floor wax buckets after wax was used and gave them to teachers.	
	Leaf Litter Sifter Option 1												
	Metal Dirt Sifter	Amazon		each	Y			18		$14.10	$253.80	One-time purchase. Need to use 1/4" mesh over top of these as the 1/4 x 1/2 diamond metal mesh is too large - will let in a lot of extra debris	
	Leaf Litter Sifter Option 2												
	cardboard wine boxes	Trader Joe's		each	Y			18		$0.00	$0.00	Most Trader Joe's locations will give you wine boxes that serve as the base for your litter sifters for free.	
	duct tape	Home Depot		12 pack	Y			1		$52.84	$52.84	this is enough for multiple schools for multiple years	
	Specimen Collection Option 1												
	Vials				N								
	Specimen Collection Option 2												
	culture plate (6 or 12 wells)	Amazon		12 pack	N			2		$23.99	$47.98		
	Specimen Collection Option 3												
	condiment cups	Amazon			N								
	Garden cultivator	Home Depot								$33.28		Helpful to have 1 or 2 cultivators for the field for groups that need access to leaves under bushes.	
	Arthropod ID books												
1.4 - Populations & Carrying Capacity	no lab materials needed												
1.5 - Community Interactions / Trophic Cascades	no lab materials needed												
1.6 - Conservation & Environmental Justice	no lab materials needed												
1.7 - Habitat Corridor Engineering Project	Atlas of Oregon Wildlife	Amazon		each	Y			5		$14.29	$71.45		

Task Set	item description	Source / Link	Item Number	Unit Size	Reusable section to section? Y/N	Quantity per group of 4	Quantity per class section (36 students)	Cost per item	Total cost per section (36 students)	Notes		
2.1-Baby Matthew Intro	No lab materials needed											
2.2-Inquiry Cube and Pattern Matching	No lab materials needed											
2.3-Building and Breaking Down	Molecular Model Kits	Amazon			Y		10	$17.00	$170.00	10 sets per teacher		
2.4-Popbeadase	Pop bead kit (bucket of 350)	Amazon		350 per bucket	Y	0.14	2	$14.01	$28.02			
	Pyrex glass test tube (16 x 150mm)	Carolina	730014	72 per pack	Y	5	45	$63.50	$2,857.50			
	Pyrex glass test tube (15 x 125mm)	Carolina	730012	72 per pack	Y	5	45	$61.55	$2,769.75			
	Test tube rack (plastic)	Carolina	731880	1	Y	1	9	$7.25	$65.25			
	Thermometer (alcohol)	Carolina	974065	1	Y	5	15	$6.56	$98.40			
	Hydrion pH paper (single roll)	Carolina	894720	1 roll	Y (one year)	1	3	$8.00	$24.00	(pH Sensor can be used instead of paper)		Labquest
	3% Hydrogen Peroxide	Grocery Store / Pharmacy	N/A	32 oz bottle	N	3 oz (approx.)	1	$1.50	$1.50			
2.4-Enzyme Lab	Distilled Water	Grocery Store / Pharmacy	N/A	1 gallon	N				$0.00	purchase a water-deionizing column for unlimited distilled water over many years		
	Red potatoes	Grocery Store		5 lb	N		1	$5.00	$5.00			
	Rulers	Amazon		3 per pack	Y	1	9	$3.99	$35.91			
	0.5 M HCl	Carolina	867527	1	Y (one year)	1	1	$8.30	$8.30	Buffer option: pH 3		
	1 M NaOH	Carolina	889571	1	Y (one year)	1	1	$8.00	$8.00	Buffer option: pH 10		
	Tweezers								$0.00	use tweezers from Biodiversity Inquiry (1.6)		
	Hot Water Bath	Amazon		1	Y	3	3	$54.00	$162.00			
									$0.00			
2.5-Yogurt Engineering	Sous Vide water circulator	Amazon		12.8" x 2.2" x 4.1	Y	3	3	$99.00	$297.00			
	Beakers just for yogurt lab											
	Thermometers											
	1% Milk	Grocery Store		Varies	N				$0.00			
	2% Milk	Grocery Store		Varies	N				$0.00			
	3% Milk	Grocery Store		Varies	N				$0.00			
	Sweetened Condensed Milk	Grocery Store		Varies	N				$0.00			
	Powdered Milk	Grocery Store		Varies	N				$0.00			
	Spoons	Amazon		Box of 1000	Y	5	45	$0.02	$0.90	enough here for multiple years		
	Dixie Cups	Amazon		Pkg of 300	N		1	$0.06	$0.06	enough here for multiple years		
	24" x 48" Plexiglass Sheet (1/4" thick)	Home Depot		1	Y	1	1	$89.98	$89.98	reuse year to year		
	Half pint canning jars	Amazon		Box of 36	N (Y year to year)	1	1	$22.99	$22.99	reuse year to year		
	Blue Tape for Ramp	Walmart	1	Pack of 6	N		1	$6.39	$6.39	enough here for multiple years		
	Starter Yogurt	Grocery Store		32 oz	Y	.5 oz	1	$4.00	$4.00	one 32 oz tub is enough for at least 4 class sections		
2.7-Protein Synthesis	No lab materials needed											
2.8-Mutations	No lab materials needed											
2.9-Explaining the Metabolism	No lab materials needed											

Task Set	item description	Source / Link	Item Number	Unit Size	Reusable section to section? Y/N	Quantity per group of 4	Quantity per class section (36 students)	Cost per item	Total cost per section (36 students)	Notes
3.1 What is a Healthy Heart Rate										
3.2 Introduction to Cells	Blood Cell Prepared Slides	https://www.flinnsci.com/slide-plasmodi	Flinn ML1042	1 Slide	Y	1	9	$13.94	$125.46	
	Skin Cell Prepared Slides	https://www.carolina.com/histology-mic	Carolina 312094	8 Slides	Y	1/8	5	$64.00	$320.00	
	Elodea	https://www.carolina.com/aquatic-plant	Carolina 162111	Pack of 12	N	1 leaf	1	$16.50	$16.50	Can grow in classroom
	Algae Prepared Slides	https://www.flinnsci.com/slide-mixed-gr	Flinn ML1055	1 Slide	Y	1	9	$9.25	$83.25	
	Glass Slides	https://www.flinnsci.com/search-results/	Flinn ML1398	72 Slides	Y	72	1	$9.60	$9.60	
	Coverslips	https://www.flinnsci.com/cover-slips-pla	Flinn ML1377	100 Pack	N?	Depends	1	$4.95	$4.95	Possible to reuse if needed
3.3 Cell Division	Onion Root Tip Prepared Slides	https://www.carolina.com/mitosis-meios	Carolina 302396	1 Slide	Y	1	9	$8.50	$76.50	
3.4 Cancer	No lab materials needed									
3.5 Human Development & Stem Cells	No lab materials needed									
3.6 & 3.7 Heart Rate & Exercise Inquiry	Heart Rate Monitors	https://www.vernier.com/product/hand-g	Vernier HGH-BTA	1 unit	Y	1	9	$129.00	$1,161.00	Taking pulse or smart watches can be used instead
	Labquest	https://www.vernier.com/product/labque	Vernier LABQ3	1 unit	Y	1	9	$399.00	$3,591.00	Can be used with all vernier probe types

Task Set	item description	Source / Link	Item Number	Unit Size	Reusable section to section? Y/N	Quantity per group of 4	Quantity per class section (36 students)	Cost per item	Total cost per section (36 students)	Notes
4.1 Cancer and Diabetes	Large Map Printouts (pgs 4-14)	2WsdrTha55ptLKHw9LekHNSuElrF_jD	Print Shop	10 Copies	Y	2	20	Varies		
4.2 Family Health History	No lab materials needed									
4.3 Genetic Variation	No lab materials needed									
4.4 Patterns of Inheritance	Mini One System (Optional)	Mini One Kit							$2,672.00	This is for 8 kits
		PTC Mini Lab							$84.00	Good for two classes
4.5 DNA and Race	No lab materials needed									
4.6 Epigenetics	No lab materials needed									
4.7 Food Sovereignty	No lab materials needed									
4.8 Geneomics Community Education Project	No lab materials needed									
4.9 Gene Editing	No lab materials needed									

Task Set	item description	Source / Link	Item Number	Unit Size	Reusable section to section? Y/N	Quantity per group of 4	Quantity per class section (36 students)	Cost per item	Total cost per section (36 students)	Notes
5.1 Race										
5.2 Natural Selection	Plier Set	Amazon	Amazon	7 piece	Y	1 per class	1	$19.99	$19.99	Demo Bird Beak Evolution
	E. coli alternate (if Flinn is sold out)	Home Science Tools						$13.33		
	Antibiotic Disk Set	Flinn Scientific						$98.06		
5.3 Adaptations	no lab materials needed									
5.4 Speciation	no lab materials needed									
5.5 Evidence of Evolution	no lab materials needed									
5.6 Human Skin Color Case Study	no lab materials needed									

Task Set	item description	Source / Link	Item Number	Unit Size	Reusable section to section? Y/N	Quantity per group of 4	Quantity per class section (36 students)	Cost per item	Total cost per section (36 students)	Notes
6.1 Climate Change & Fires	no lab materials needed									
6.2 Carbon Cycle (Leaf Disc)	30 mL syringes	Amazon						**$17.99**		
	Hole Punch	Amazon						**$9.99**		
	Hydrogen Peroxide	Fred Meyer						**$1.19**		
6.3 Geological History	no lab materials needed									
6.4 TH/SH Indigenous Land	no lab materials needed									